FINAL YEAR PROJECT REPORT

AUTOMATIC WIRELESS SATELLITE POSITIONING ANTENNA SYSTEM

In fulfillment of the requirement
For degree of
BET

By

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ABSTRACT

This report discusses the scope and detailed description of our final year project "Automatic Wireless Satellite Dish Positioning System". The project is designed to adjust the dish to receive TV signals of maximum strength from satellite. This positioning system can also be used in GPS satellite tracking system, remote sensing, broadcasting, and mobile or internet satellite services. It consists of two stepper motors that enable the satellite dish to move in horizontal or vertical direction using zigBee technology. As zigBee is a global protocol build up by IEEE 802.15 working group to support applications related to wireless personal area networks, so it is used for wireless communication between indoor and outdoor unit in our project. It sends coded data to receiver whose output is sent to microcontroller which sends control signals to geared motors through driver. It operates in the unlicensed band of 2.4GHz using the both offset Quadrature Phase Shift Keying and Direct Sequence Spread Spectrum modulation technique. It provides low data rates, consumes very low power and is thus characterized by long battery life.

This report briefly tells about the system and its technical description. The focus of the report is to discuss the scope and objectives of our project, components used and describe the technology used in this project.

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